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10/714,823	11/17/2003	Claire Svetlana Vishik	1033-T00468	2178
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary**Application No.**

10/714,823

Applicant(s)

VISHIK, CLAIRE SVETLANA

Examiner

Ed Baird

Art Unit

3695

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) 5, 7, 9, 16, 18, 19, 27 and 29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6, 8, 10-15, 17, 20-26, 28, and 30-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on **27 April 2009** has been entered.

Status of Claims

2. Applicant has amended claims 1, 2, 6, 12 – 15, 17, 20 – 26, 28, and 30 – 33 have been amended. No claims have been added or canceled. Claims 5, 7, 9, 16, 18 – 19, 27, and 29 were canceled prior to the last office action. Thus, claims 1 – 4, 6, 8, 10 – 15, 17, 20 – 26, 28, and 30 – 33 remain pending and are presented for examination.

Response to Arguments

3. Applicant's remarks/ arguments filed **27 April 2009** have been fully considered.
4. Examiner acknowledges amendments to claims 1 and 2 to overcome 35 U.S.C. § 101 rejection of **claims 1 – 4, 6, 8, 10, and 11**. However, amendments did not overcome rejections. Claims 1 – 4, 6, 8, 10, and 11 are method claims and must (1) be tied to a particular machine or apparatus, or (2) transform underlying subject matter (such as an article or materials) to a different state or thing to satisfy 35 U.S.C. § 101. See rejection below.
5. Examiner acknowledges amendments to **claims 12 – 15, 17, 20 – 22** to overcome 35 U.S.C. § 101 rejection. However, amendments did not overcome rejections. Claims 12 – 15,

17, 20 – 22 are system or apparatus claims which appear to describe a data structure (i.e. software) and not hardware. See rejection below.

6. Applicant's arguments filed with respect to **claims 1 – 4, 6, 8, 10 – 15, 17, 20 – 26, 28, and 30 – 33** regarding the 35 U.S.C. § 103(a) rejections have been fully considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. Claims 1 – 4, 6, 8, 10 – 15, 17, and 20 – 22 are rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter.

9. **Claims 1 – 4, 6, 8, 10, and 11**, method claims, are rejected under 35 U.S.C. §101 because, in order to comply with §101 a process/ method must (1) be tied to a particular machine or apparatus, or (2) transform underlying subject matter (such as an article or materials) to a different state or thing.

The methods recited in the claims fail to (1) be tied to a particular machine or apparatus, or (2) transform underlying subject matter to a different state or thing. *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972).

There are two corollaries to the machine-or-transformation test. First, a mere field-of-use limitation is generally insufficient to render an otherwise ineligible method claim patent eligible. This means the machine or transformation must impose meaningful limits on the

method claim's scope to pass the test. Second, insignificant extra-solution activity will not transform an unpatentable principle into a patentable process. This means reciting a specific machine or a particular transformation of a specific article in an insignificant step, such as a data gathering or outputting, is not sufficient to pass the test.

There is no recitation within the claims to indicate that the steps that comprise the method are nothing but mental steps performed within the mind of a person. Thus, to qualify as a § 101 statutory process, the claim should positively recite the other statutory class (the thing or product) to which it is tied, for example by identifying the apparatus that accomplishes the method steps, or positively recite the subject matter that is being transformed, for example by identifying the material that is being changed to a different state.

10. **Claims 12 – 15, 17, 20 – 22**, apparatus claims, are rejected under 35 U.S.C. §101 because the disclosed invention is inoperative and therefore lacks utility. It appears that the claims describe a data structure (i.e. software) and not hardware.

Data structures not claimed as embodied in computer-readable media are descriptive material *per se* and are not statutory because they are not capable of causing functional change in the computer. See, e.g., *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure *per se* held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory. (MPEP 2106.01 Computer-Related Nonstatutory Subject Matter).

In order to comply with 35 U.S.C. § 101, the claims must clearly indicated hardware or software tied to hardware.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. § 103 (a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 1, 6, 10 - 12, 20 - 23, and 30 - 33 are rejected under 35 U.S.C. § 102(e) as being anticipated by **Richey et al** (US Pub. No. 2003/00233292) in view of **Javangula et al** (US Patent No. 7,246,084) in further view of **Kiss et al** (US Patent No. 6,484,155).

13. Regarding **claims 1, 12, and 23**, **Richey** teaches:

- creating a line-by-line user interface by the network element, the line-by-line user interface including a transaction with multiple user-selectable links to multiple destinations for multiple question types per line item [see at least 0028 and Figure 4] – Examiner notes that Figure 4 represents a RFI request window which contains a number of **user-selectable links** to connect to information.
- sending the line-by-line user interface to the user device, the line-by-line user interface enabling a consumer to review and selectively question individual line items in the transaction via the line-by-line user interface [see at least 0029] – Examiner interprets *retrieving the relevant transaction (information)* as analogous to Applicant's **sending the line-by-line user interface to the user device**.

- receiving an input of a user-selectable link from a consumer, the user-selectable link questioning at least one of the individual line items of the transaction [see at least 0032] – Examiner interprets *RFI and writing the RFI a request queue* as Applicant's receiving a consumer's input questioning; and
- routing data from the network element to the destination associated with the user-selectable link [see at least 0031] – Examiner interprets *submitting the RFI to the online dispute resolution system (again)* as analogous to Applicant's **routing data to a destination associated with the user-selectable link**.

Richey does not explicitly disclose:

- determining, at a network element, a device type of a user device of a consumer.
- creating a interface, wherein the interface is based at least partially on the determined device type;

However, **Javangula** teaches a method for processing electronic orders including receiving order data and receiving device identification data from a mobile customer device, thus identifying the device [column 2 lines 49 - 64]. Customer devices may include, without limitation, a personal computer, a mobile device, a mobile telephone, such as a Wireless Access Protocol (WAP) telephone [column 4 lines 45 – 49] or a PDA [column 7 lines 55- 60]. He claims the mobile device receiving product and service information according to the type of mobile device and the communications protocol used by the mobile device as determined by the device identification data [claim 15].

Therefore it would have been obvious to a person having ordinary skill in the art at the time of the instant invention to modify **Richey's** disclosure to include *a communications protocol to determine mobile device* as taught by **Javangula** because doing so allows the customer to

receive product and service information in a form most suitable for the customer's device
[Javangula column 11 lines 10 – 22].

Neither **Richey** nor **Javangula** explicitly discloses:

- determining a destination associated with the user-selectable link using an ontology.

However, **Kiss** teaches a *knowledge management system that supports inquiries of distributed knowledge resources* [column 2 lines 41 – 49]. He further discloses inferencing [sic] mechanisms distributed to many, smaller knowledge systems, each having a more clearly defined set of interests and products [column 3 lines 48 – 65]. He further claims a knowledge management system with attribute information comprising: interests, capabilities, knowledge source, knowledge ontology, knowledge domain, *inter alia* [claim 27].

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the instant invention to modify **Richey's** disclosure to include *knowledge ontology in a knowledge management system* as taught by **Kiss** because, using dynamic distributed-inferencing, users can find solutions to problems using agents which collaborate among various knowledge modules [**Kiss** column 4 lines 57 – 67].

14. Regarding **claim 6**, **Javangula** discloses:

- the user device of the consumer comprises a mobile communications device.

as discussed in the rejection of claim 1. Thus, this claim is rejected for the same reasons.

15. Regarding **claim 10, 21, and 32**, **Richey** teaches:

- the multiple user-selectable links comprise a first link that facilitates communication with a human to address a first question type, and a second link that facilitates machine-to-machine communication to address a second question type without requiring human intervention [0034];

16. Regarding **claims 11, 22, and 33**, **Richey** teaches:

- the line-by-line user interface is integrated with a workflow or business process management tool to enable modifying routing of consumer requests [see at least 0132 to 0146].

Examiner interprets Imaging/Documentation Management, Fraud Reporting and Feedback, Reporting and Monitoring as examples of Applicant's **business process management tools**.

17. Regarding **claims 20 and 31, Richey** teaches:

- the user device of the consumer is adapted to present an online form for a line item, the online form to receive consumer-entered text to direct to a selected one of the multiple user-selectable links [see at least 0126 to 0131]. Examiner interprets *questionnaire* as analogous to Applicant's **online form**.

18. Regarding **claim 30, Richey** teaches:

- the multiple user-selectable links comprise a plurality of electronic mail addresses [see at least 0137].

19. Claims 2, 3, 13, 14, 24, and 25 are rejected under 35 U.S.C. 103 (a) as being unpatentable over **Richey** in view of **Javangula** in further view of **Kiss** in further view of **Thomas et al** (US Pub. No. 2004/0236660).

20. Regarding **claims 2, 3, 13, 14, 24, and 25**, neither **Richey, Javangula** nor **Kiss** explicitly discloses:

- processing at the network element an extensible Markup Language (XML) representation of each of the individual line items to create the line-by-line user interface, wherein the XML representation includes tags within which the multiple user-selectable links per line item are defined.
- the XML representation corresponding to a particular line item identifies a corresponding database from which data associated with the particular line item can be verified.

However, **Thomas** teaches a multiparty transaction system for managing the payment of invoices where approval of multiple parties is [sic] involved [Abstract]. He further discloses tagging data using some sort of tagging or data file structure such as extensible Markup Language (XML) [0056].

Therefore it would have been obvious to a person having ordinary skill in the art at the time of the instant invention to modify **Richey's** disclosure to use XML tags as taught by **Thomas** because line items may be viewable in an Internet browser or be coded to be read and input directly to a database without manual entry. XML documents also allow hierarchical data to be sent in a single document [**Thomas** 0056].

21. Claims 4, 15, and 26 are rejected under 35 U.S.C. 103 (a) as being unpatentable over **Richey** in view of **Javangula** in further view of **Kiss** in further view of **Lam et al** (US Pub. No. 2003/0220843).

22. Regarding claims 4, 15, and 26, neither **Richey**, **Javangula** nor **Kiss** explicitly discloses:

- for a line item, the multiple user-selectable links comprise a first link to question the line item, a second link to dispute the line item, and a third link to accept the line item.

However, **Lam** teaches a method of facilitating resolution of a dispute between a buyer and a seller in an electronic payment system [Abstract]. He further discloses dispute logic which handles a variety of actions related to the dispute including editing the disputed portion of the invoice, chatting with the appropriate personnel at the seller regarding the disputed invoice, rejecting the invoice, canceling the invoice, finalizing the invoice and making a partial payment of the invoice [0037]. These functions are handled by edit logic, chat logic, reject logic, cancel logic, finalize logic and partial pay logic respectively [see at least 0035 to 0040]. Examiner

interprets edit logic, chat logic, reject logic, cancel logic, finalize logic, and partial pay logic as indicative of Applicant's multiple **links** to resolve **line item disputes**.

Therefore it would have been obvious to a person having ordinary skill in the art at the time of the instant invention to modify **Richey's** disclosure to *use multiple links to question, dispute and correct invoices* as taught by **Lam** because doing so automates the system and divides the processes into discrete logic steps.

23. Claim 8 is rejected under 35 U.S.C. 103 (a) as being unpatentable over **Richey** in view of **Javangula** in further view of **Kiss** in further view of **Zimmer et al** (US Pub. No. 2003/0051226).

24. Regarding **claim 8**, neither **Richey**, **Javangula** nor **Kiss** explicitly discloses:

- the line-by-line user interface is presented by an interactive voice response unit.

However, **Zimmer** teaches using a voice activated device to input data and other commands into the processor [see at least 0784].

Therefore it would have been obvious to a person having ordinary skill in the art at the time of the instant invention to modify **Richey's** disclosure to *use voice activated devices to input data* as taught by **Zimmer** because doing so makes the system and method automated and easier to use.

25. Claims 17 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Richey** in view of **Javangula** in further view of **Kiss** in further view of **Lam** and **Kumar et al** (US Pub. No. 2001/0023414).

26. Regarding **claims 17 and 28**, neither **Richey**, **Javangula** nor **Kiss** explicitly discloses:

- for a line item, the multiple user-selectable links comprise a **first link** to question an amount of a product or a service associated with the line item and a **second link** to question a **billing rate** associated with the line item.

Lam discloses dispute logic which handles a variety of actions related to the dispute including editing the disputed portion of the invoice, chatting with the appropriate personnel at the seller regarding the disputed invoice, rejecting the invoice, canceling the invoice, finalizing the invoice and making a partial payment of the invoice, as discussed above [see at least 0035 to 0040].

In addition, **Kumar** discloses interactive user-interface for ordering specific calculated and solution-oriented results related to finance [0022]. This is provided within a software suite for enabling viewing and manipulation of multiple categories of aggregated data compiled from a plurality of data sources and accessible through a single interfacing node operated on a data-packet-network [0022]. An interface has an input section for entering the appropriate criteria required to calculate a solution, which answers the question posed within drop-down menu [0288]. Several data fields are listed: one for the average monthly billing (for the credit card), one for reporting the planned *monthly payment amount*; and one for an *annual interest rate*. Examiner interprets *monthly payment amount* as analogous to Applicant's **amount of a product or a service** in that it reflects what is owed. Examiner interprets *annual interest rate* as analogous to Applicant's **billing rate** in that it reflects an interest rate on what is owed.

Therefore it would have been obvious to a person having ordinary skill in the art at the time of the instant invention to modify **Richey's** disclosure to include *links to amounts and rates* as taught by **Kumar** because it allows users to input information to provide a variety of calculative options for solving billing (credit card) issues [0287].

Conclusion

The prior art of record and not relied upon is considered pertinent to Applicant's disclosure:

- **O'Neil et al:** "Method and resulting system for integrating a query reformation module onto an information retrieval system", (US Pub. 2002/0143524).
- **Jones:** "Developing Shared Ontologies in Multi-agent Systems", Department of Computer Science, University of Liverpool, U.K., ECAI'98 Workshop on Intelligent Information Integration, 1998.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ed Baird whose telephone number is (571)270-3330. The examiner can normally be reached on Monday - Thursday 7:30 am - 5:00 pm Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles R. Kyle can be reached on 571-272-6746. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://portal.uspto.gov/external/portal/pair>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ed Baird/
Examiner, Art Unit 3695

/Narayanswamy Subramanian/
Primary Examiner, Art Unit 3695